

# apb FORUM

The preparation of this Newsletter was financed in part through a Transportation Planning Grant from the U. S. Department of Transportation  
VOLUME 11, NUMBER 4 JULY 1977

## TRANSPORTATION ALTERNATIVES SELECTED

### TRANSPORTATION WORKSHOP NO. 3

Three sessions of the third citizen workshop were held at 7:30 P.M. on June 7-9, 1977, in the Palm Beach Gardens, Delray Beach and West Palm Beach. Public notices for the workshop were distributed to the media and posters announcing the workshop were distributed throughout the Palm Beach County Urban Area. In addition, workshop notices were sent to all previous workshop attendants and municipalities.

### WORKSHOP PURPOSE

The purpose of the Workshop No. 3 sessions was to review analytical results prepared for the 8 Transportation System Concepts and to select three system Concepts for further consideration and in-depth analysis. The workshop session included a description of each of the 8 transportation system concepts under consideration, procedures used to analyze these concepts, potential tax revenues and a presentation of analytical results concerning the pros and cons of each concept.

A recommendation was made by the Consultant concerning the three concepts that should receive further consideration. A discussion period followed which provided attending citizens the opportunity to discuss their concerns and forward their recommendations.

### WORKSHOP HIGHLIGHTS

The 8 transportation system concepts under consideration in the development of the Year 2000 Transportation Plan include four highway concepts and four transit concepts. The highway concepts can be described as follows:

#### 1. MODIFIED EXISTING-PLUS-COMMITTED HIGHWAY SYSTEM CONCEPT.

- (a) The existing major arterial roads;

- (b) The committed major roadway improvements of the next five years;
- (c) Additional roadway improvements required to make the system somewhat operable to meet Year 2000 travel demand.

#### 2. MAJOR ARTERIAL HIGHWAY SYSTEM CONCEPT.

- (a) The existing major arterial roads;
- (b) The committed five year improvements;
- (c) Additional major improvements for the major arterial system in order to offer a moderate quality of service for the expected Year 2000 travel demand.

#### 3. 1990 ADOPTED HIGHWAY PLAN

This concept is the formally adopted 1990 Highway Plan. The Plan was adopted on September 25, 1974, and was designed to meet expected 1990 highway travel needs. This plan is being considered to determine its ability to meet Year 2000 travel demands.

#### 4. MODIFIED ADOPTED HIGHWAY PLAN

Certain deficiencies are currently contemplated in the ability of the currently adopted 1990 HIGHWAY PLAN to meet expected Year 2000 travel demand. The 1990 HIGHWAY PLAN was therefore modified by adding certain improvements to make the Plan operable at a high quality of service in lieu of expected Year 2000 travel demand.

The four transit system concepts under consideration are as follows:

#### 1. LIGHT RAIL TRANSIT CONCEPT

Light rail transit is generally a trolley or street car system operating at moderate speeds (30-50 Miles per Hour). It would operate in the median strip of Interstate 95 on a track or guideway between Boca Raton and Palm Beach Gardens.



Feeder bus service would be required to take user to and from the corridor serving light rail system.

## 2. EXPRESS BUS CONCEPT

Express buses would be operated throughout the day on I-95 reserved lanes between Boca Raton and Palm Beach Gardens. Feeder buses would take patrons to and from the express buses or express buses would pick up passengers at designated pick-up points. The purpose of this system is to provide frequent and express service for longer intra-county trips.

## 3. MODIFIED EXISTING FIXED ROUTE TRANSIT CONCEPT.

This concept includes the existing fixed route system with the following modifications:

- (a) ½ hour frequency on north/south routes;

- (b) 1 hour frequency on east/west routes; and  
(c) Selected route extensions to expected Year 2000 market areas.

## 4. LOCAL TRANSIT CONCEPT

The existing fixed route service has an intra-county orientation. The local transit concept would supplement this service by focusing local services on local/short trip needs. Seven potential service areas have been identified.

Each of these concepts was analyzed through the use of performance measures. Table 1 presents the performance measures/criteria used to evaluate both the highway and transit concepts. The evaluation assumes that there is equal importance for all measures used.

As is shown in Table 1, the Modified 1990 Adopted Highway Plan rates highest when compared to the

TABLE 1  
TRANSPORTATION SYSTEM PERFORMANCE ANALYSIS

### HIGHWAY CONCEPTS

PERFORMANCE CRITERIA	MODIFIED EXISTING PLUS COMMITTED (1)	MAJOR ARTERIAL CONCEPT (2)	1990 ADOPTED PLAN (3)	MODIFIED 1990 PLAN (4)
<b>USER</b>				
a. Reduced Travel Time	-	0	+	+
b. Reduced User Travel Costs	-	0	+	+
c. Reduced Accident Exposure	-	0	+	+
<b>SYSTEM</b>				
a. Decreased Vehicle Miles	0	0	0	+
b. Decrease Hours of Travel	-	0	+	+
c. Increase Average Speed	-	0	+	+
d. Reduce Deficiency Miles	-	-	0	+
e. Encourage Balance of Modes	0	+	-	-
f. Decrease Fuel Consumption	-	0	+	+
g. Increase Auto Occupancy	+	+	-	-
<b>COMMUNITY</b>				
a. Increase Air Quality	-	0	+	+
b. Minimize Neighborhood Disruption	+	+	-	-
c. Decrease Capital Costs	+	0	-	-
d. Decrease Maintenance Costs	0	0	-	-
e. Increase Revenue (Gas Tax)	+	0	-	-
<b>TOTAL</b>	<b>-(1)</b>	<b>0(-7)</b>	<b>0(1)</b>	<b>+(3)</b>

### TRANSIT CONCEPTS

PERFORMANCE CRITERIA	LIGHT RAIL (1)	EXPRESS BUS (2)	MODIFIED FIXED ROUTE (3)	LOCAL TRANSIT (4)
<b>USER</b>				
a. Local Coverage	-	-	0	+
b. Intra County Coverage	0	0	+	-
c. Reduced Travel Time	+	+	-	0
d. Convenience	-	-	0	+
<b>SYSTEM</b>				
a. Decrease Auto Travel	+	+	0	0
b. Decrease Fuel Consumption	+	+	+	+
c. Reduce Deficiencies	+	+	0	0
d. Balance of Modes	+	+	+	+
<b>COMMUNITY</b>				
a. Increased Air Quality	+	0	0	0
b. Minimize Disruption	-	0	+	+
c. Decrease Capital Costs	-	-	+	0
d. Decrease Deficits	-	-	+	0
e. Special Users	-	-	0	+
<b>TOTAL</b>	<b>0(1)</b>	<b>+(1)</b>	<b>+(1)</b>	<b>+(3)</b>

- Negative Effect

0 No Effect

+ Positive Effect



other highway concepts. While this concept offers the highest level of service it also is the most costly concept. While it is not entirely appropriate to compare the transit concepts to each other because they provide different types of service, the local transit concept ranks highest. The express bus and fixed route concepts are comparable in rank, while the light rail concept ranks lowest.

The development of any plan implies that it must be financially implementable. The financial revenue sources available to finance highway and transit improvements were assessed. It was found that:

- \* Approximately \$640,000,000 in gas tax revenues will be generated between 1977 and the Year 2000.
- \* Approximately \$68,000,000 in federal operating and capital assistance may be available to finance the transit operating deficit.

The gas tax revenues are typically used to finance highway improvements, maintenance, debt service and administrative costs. Approximately \$100,000,000 will be available for highway improvements and matched with federal assistance, provide a total highway improvement fund of approximately \$400,000,000. The federal transit assistance will finance up to 50% of the operating deficit and up to 80% of capital improvements.

Table 2 presents the financial implications associated with the highway and transit concept. An evaluation of the highway concepts show that:

- \* The adopted 1990 highway plan and modified 1990 highway plan can not be financed given current tax revenue sources; and
- \* The tax revenue sources are expected to decline during the mid 1980's due to vastly improved vehicle fuel consumption characteristics.

These observations imply that:

1. Highway improvements be focused on major problem areas of the major arterial system; and
2. The more capital intensive improvements be staged in the short term due to the expected availability of revenue sources.

The transit operating cost analysis reveals that the light rail concept and local transit concept as evaluated can not be financed. On the other hand, Table 2 suggests that a modified fixed route service with specialized express bus and some local service can be financed.

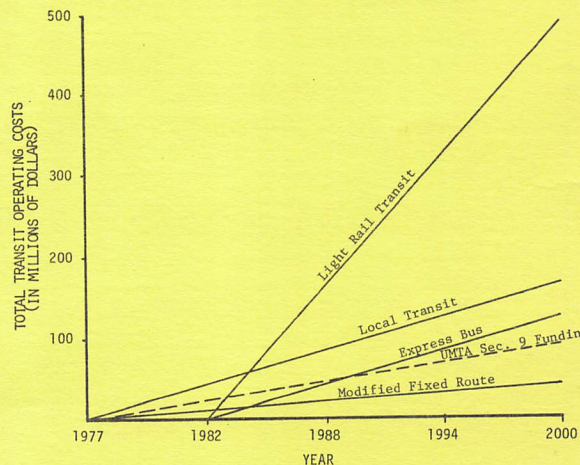
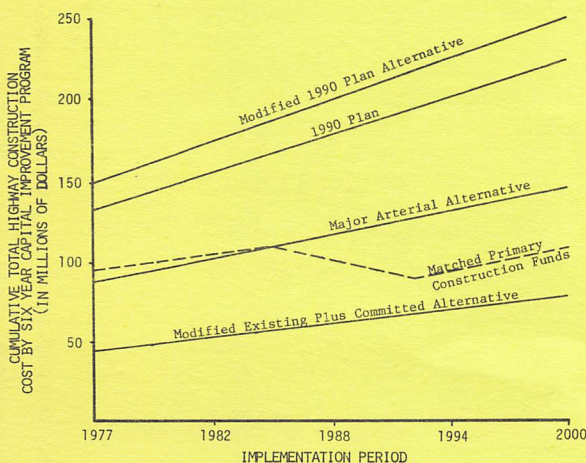
On the basis of this evaluation, three integrated highway and transit networks were deemed appropriate for further consideration. These are as follows:

- A. Combining the modified existing plus committed highway concept (low auto service) with a high level of transit service (modified fixed route, limited express bus and limited local service).
- B. Combining the Major Arterial Highway Concept (moderate auto service) with a moderate transit service (modified fixed route service and limited express bus service).
- C. Combining the 1990 Adopted Highway Plan (high auto service) with a low to moderate transit service (modified fixed route service).

The advantage of combining the highway and transit concepts in this fashion are twofold. The benefits of lower and higher auto dominant versus transit dominant improvements can be assessed. The benefits for lower levels-of-service versus higher levels-of-service for auto and transit improvements can be evaluated.

Citizens attending workshop sessions felt that the three combined concepts recommended for further evaluation, were appropriate.

TABLE 2  
TRANSPORTATION SYSTEM FINANCING





## AREA PLANNING BOARD OF PALM BEACH COUNTY

James Jones CHAIRMAN	Appointed by:	Palm Beach County Legislative Delegation
Charles W. Potter VICE CHAIRMAN	Appointed by:	Palm Beach County Legislative Delegation
Thomas Altman	Appointed by:	Palm Beach County Legislative Delegation
Peggy B. Evatt	Appointed by:	Board of County Commissioners Palm Beach County
Robert Harp	Appointed by:	Palm Beach County Legislative Delegation
Dr. Bernard Kimmel	Appointed by:	School Board of Palm Beach County
W. H. Medlen	Appointed by:	Board of County Commissioners Palm Beach County
R. William Rutter Jr.	Appointed by:	Board of County Commissioners Palm Beach County
Dorothy H. Wilken	Appointed by:	Palm Beach County Legislative Delegation
Frank W. Brutt	Executive Director	

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